# Microsoft–Polycom Integrated Solution

## **User's Guide**



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## Microsoft—Polycom Meeting Scenarios

Microsoft–Polycom integrated solution offers high quality point-to-point and multipoint voice, and video conferencing calls (in any combination) across communication devices, applications and services. This solution empowers users to connect and share information in real-time regardless of type of call. Polycom enhances Microsoft's environment by:

- enabling Polycom endpoints (VSX and PVX) to be added to Office Communicator and Windows Messenger buddy list
- bridging between Microsoft SIP-only environment and legacy ISDN, PSTN and H.323 endpoints
- displaying the user/endpoint presence in the buddy list
- starting a point-to-point or multipoint meeting directly from Polycom endpoints, Office Communicator and Windows Messenger.

In the Microsoft – Polycom environment, two arrays of meeting scenarios are available; Those intended for Windows Messenger and Office Communicator that do not leverage and are not based on SIP-CX conferencing and those intended for Office Communicator and are based on SIP-CX conferencing.

## Windows Messenger and Office Communicator scenarios that do not leverage and are not base on SIP-CX conferencing

The Meeting Rooms and/or Entry Queues defined in Polycom MGC Manager application and LCS 2005 are used in the Windows Messenger and Office Communicator to initiate multipoint video conferences. This chapter details the various multipoint conferencing scenarios and how to start an ongoing video conference from your Windows Messenger or Office Communicator. The following meeting scenarios are explained:

• Multipoint Meet-Me

- "Single dial" Entry Queue (Office Communicator users only)
- Multipoint Ad-hoc conferencing
- Reservation-based dial-out
- Extending an ongoing Windows Messenger or Office Communicator multipoint session into a multipoint audio and video conference.

**Office Communicator scenarios that are based on SIP-CX conferencing:** With SIP-CX component you can start or join a meeting and you can control and monitor the ongoing meeting that are based on directly from within Office Communicator. Additional conferencing scenarios are available with Office Communicator SIP-CX component:

- Starting a New Conference directly from within Office Communicator
- An Office Communicator user invites another Office Communicator user to the Conference
- An Office Communicator user dials out to another office communicator user media device
- Adding Audio/Video to an Office Communicator multiparty IM session from the Conversation window using the Conferencing button
- Scheduling a Meeting Office Communicator-Outlook integration

Appendix A details step-by-step procedures required to enable multipoint audio and video conferencing from Office Communicator and Windows Messenger.

## **Point-to-Point Meeting**

Polycom PVX and VSX high quality video endpoints are LCS 2005 compatible; they can register with the LCS 2005 and can be added to Windows Messenger and Office Communicator buddy lists, displaying their presence status. This enables you to start a point-to-point video conference from your buddy list (in this scenario, the MGC unit is not required).

## **Multipoint Conferencing Scenarios**

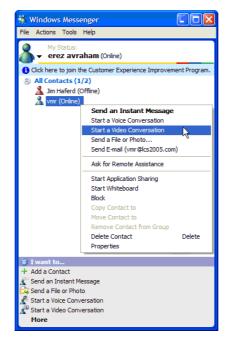
This section describes the various multipoint conferencing scenarios available with Microsoft Windows Messenger or Office Communicator and Polycom endpoints and MGC unit.

### Meet Me—Starting an Ongoing Video Conference from Windows Messenger and Office Communicator

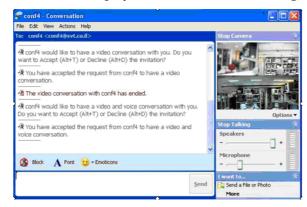
The Meeting Room that was added to the buddy list of Office Communicator or Windows Messenger can be used to start a multipoint video conference. You select it from the buddy list. PVX, VSX and legacy endpoints can all dial the Meeting Room number (ISDN)/alias (H.323)/ SIP URI to join the running conference.

## To start a video conference using the Meeting Room in Windows Messenger:

1 In the Windows Messenger buddy list, right-click the Meeting Room name, and then click **Start a Video Conversation**.



The video is displayed in the Windows Messenger window.



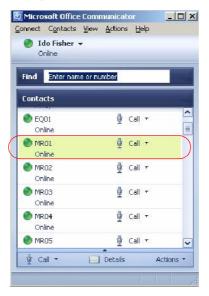
Since Windows Messenger does not support DTMF codes, conference password as a security measure cannot be implemented, and the video layout cannot be changed via Click&View (a feature of using Polycom endpoints and the MGC MCU).

The Meeting Room is activated, and you are added to the Meeting Room as the first participant.

The video layout displayed in the Windows Messenger window depends on the Meeting Room video settings.

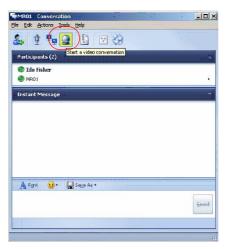
## To start a video conference using the Meeting Room in Office Communicator:

1 In Office Communicator buddy list, select the Meeting Room (for example, MR01) and then click **Call**.



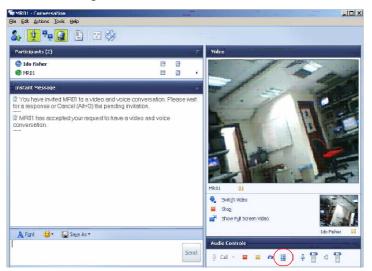
The Conversation window opens.

**2** Click the *Start a video conversation* icon to activate and join the conference.



The Meeting Room is activated, and you are added to the Meeting Room as the first participant.

If a conference password is implemented as a security measure, you must enter the appropriate conference password to enter the conference using the Office Communicator keypad selected from the *Audio Controls* pane.



The video layout displayed in the Office Communicator window depends on the Meeting Room video settings.

The conference video layout can be changed via Click&View (a feature of using Polycom endpoints and the MGC MCU) using the appropriate DTMF code.

#### Joining the Ongoing Conference

Other Windows Messenger or Office Communicator users can join the conference by selecting the same Meeting Room from the Contact/Buddy list (provided the Meeting Room was added to their contact/buddy list).

Other, non-Windows Messenger or Office Communicator users can join the conference. Participants using an ISDN connection dial the conference dial-in number as allocated to the Meeting Room when it was created. When using Office Communicator that supports the use of DTMF codes, a conference password can be implemented as a security measure. Office Communicator users joining the conference enter the conference password using the keypad from the *Audio Controls* pane. In addition, the conference video layout can be changed via Click&View (a feature of using Polycom endpoints and the MGC MCU).

Participants using an H.323 connection dial a string composed of the IP Network Service Prefix and the conference numeric ID. For example, if the IP Network Service Prefix is 34 and the conference Numeric ID is 2879, H.323 participants will dial 342879 to connect to the conference.

#### **MGC Manager Monitoring**

The active Meeting Room is displayed in the MGC Manager, in the On Going Conferences list.

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F6 - Field 211	Name	Status	Connection	Participant Nu	Network	Connectio	Audio	Video
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	A MR01_(000)		- Cannected	ida@ip.co.il	SIP	Dial-in	211	B
F6 - Field 6								
Field 7								
F6 - Field 8 (Normal)								
H - K MCU Configuration								
On Going Conferences(1)								
😑 - 🎒 MENI								
- 🤯 On Going Gateway Sessions(0)								
Participants Queue(0)	1							
Reservations(0)								
Heeting Rooms & Entry Queues(44								
🦓 MR01								

#### Single Dial Entry Queue

An Entry Queue is used as a special routing lobby to all Meeting Rooms and conferences, enabling one dial-in number to be used for joining all conferences. Participants are routed to the destination conference by entering the conference ID using DTMF codes.



This scenario is supported only with Office Communicator. Windows Messenger does not support DTMF codes.

In this mode, only one or a few Entry Queues are defined and added to the Office Communicator contacts list, which keeps the list small and easy to manage, while with Meeting Rooms, it requires each Meeting Room to be defined and added to the contacts list resulting in a long list.

The Entry Queue is created and added to the buddy list of Office Communicator. The target conferences (Meeting Rooms) are also created in the MGC Manager application. This is the recommended meeting scenario.

## To start a video conference using the Meeting Room in Office Communicator:

1 In Office Communicator, in the buddy list, select the Entry Queue and then click **Call** or double-click the Entry Queue entry.

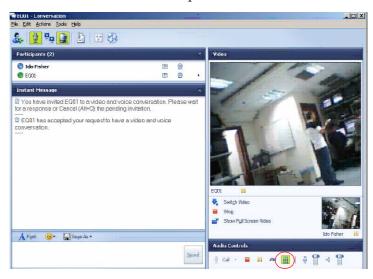


The Conversation window opens.

**2** Click the *Start a video conversation* icon to activate and join the conference.



**3** Once connected to the Entry Queue the IVR system prompts you for the target conference ID. Click the keypad icon in the Office Communicator *Audio Controls* pane.



4 On the keypad, enter the target conference ID followed by the pound (#) key.



You are moved to the conference.

#### Joining the Ongoing Conference

Other Office Communicator users can join the conference by connecting to the Entry Queue and entering the target conference ID as described in steps 1-4.

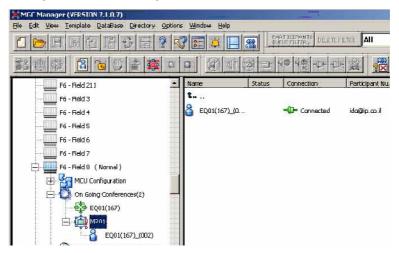
Other, non-Office Communicator users can join the conference via the Entry Queue. Participants using ISDN connection dial the Entry Queue dial-in number.

Participants using H.323 connection dial a string composed of the IP Network Service Prefix and the Entry Queue numeric ID.

Once connected to the Entry Queue they are routed to their target conference according to the conference ID they enter using DTMF codes.

#### **MGC Manager Monitoring**

The active Entry Queue and Meeting Room are displayed in the MGC Manager, in the On Going Conferences list.



#### **Ad-hoc Entry Queue and Conference Creation**

This procedure is similar to the Single Dial Entry Queue procedure, with the exception that the Meeting Room is not defined in the MGC Manager in advance and the ongoing conference is created on-the-fly.

In addition, the Entry Queue must be set as Ad-hoc, and the conference Profile must be assigned to it.

When the user enters the target conference ID, the MCU checks for an ongoing conference with this ID. If such a conference does not exist, a new conference is created using the parameters defined in the conference Profile. The conference ID sent by the user (using DTMF codes) is assigned to the new conference.



This scenario is supported only with Office Communicator and is the recommended scenario for Office Communicator users as no Meeting Rooms have to be defined in advance and stored in the MCU memory. This scenario is not supported with Windows Messenger as it does not support DTMF codes.

For a detailed description of Ad-hoc conferencing and External database Authentication, see Chapter 4.

#### **Dial-out to Conference Participants**

In this scenario, a video conference is scheduled on a Polycom MCU and it includes predefined participants; Office Communicator, Windows Messenger and other SIP and non-SIP users.

At the scheduled time the conference is activated and the MCU automatically dials out to the predefined participants and connects them to the conference.

Once dial out is attempted by the MCU, the INVITE request will be routed to each participant's UA assuming participant's UA is registered with the LCS at that time.

For a detailed description of the conference definition, see the MGC Manager User's Guide, Volume I, Chapter 4.

#### To define a SIP participant:

- 1 In the Conference or Reservation *Properties* dialog box, click the **Participants** tab.
- **2** In the *Participants* tab, click the **New** button to define a new participant.

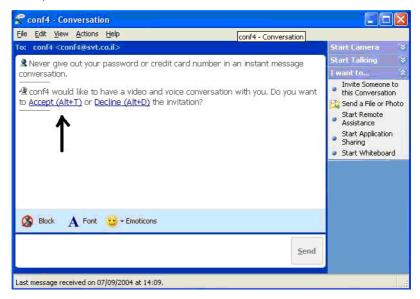
The Participant Properties - Identification dialog box opens.

Default-Participant Properties	×
Identification Advanced	
Name:	
Default-Participant	
User Identifier String sent to Recor	ding sustem:
	ang oyoch.
Connection Type:	Interface Type
Dial-in	SIP T
Participant IP	Signaling Port
0.0.0.0	5060
SIP Address:	
Address Type:	
SIP URI	
User Defined 1:	User Defined 2:
User Defined 3:	User Defined 4:
User Delined 5.	User Denned 4.
Broadcasting Volume(5)	Listening Volume(5)
bioaucasting volume(s)	Listening Volume(5)
Audio Only	
Save Participant	IK Cancel Help

- **3** Define the following parameters:
  - **a** *Name* Enter the participant name.
  - **b** *Connection Type*—Select **Dial-Out**.
  - **c** *Interface Type*—Select **SIP**.
  - **d** *SIP Address* Enter the participant address in the format [user name]@[domain]. Do not use spaces or special characters such as commas, quotation marks, inverted tags and so forth either in the user name or in the domain part.
  - e Address Type-Select SIP URI.
  - **f** Click **OK** to close the dialog box and return to the conference *Properties* dialog box.
- 4 Complete the conference definition and click **OK**.

#### Joining the Conference

Once the conference is activated, the MCU calls the defined participants. Office Communicator and Windows Messenger users must accept the invitation sent from the video conference to join the conference ("conf4" shown in the example below, is the name of the conference running on the MCU).



#### Escalating Windows Messenger or Office Communicator IM Multiparty Session to an Audio/Video Conference

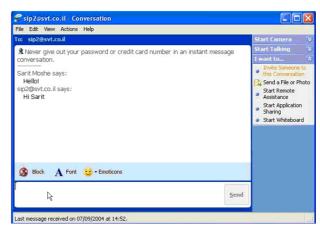
When you invite several buddies to a Windows Messenger or Office Communicator **IM** session, you can add audio and video to the conference after it has started (provided that the other participants have video capabilities). These can be done in one of the following methods:

- Defining an Ad-hoc Entry Queue (see Chapter 2, "Procedure 8– Defining Additional Conferencing Components in the MGC Environment" on page 2-27) and registering this Entry Queue with the LCS so it will appear in the buddy list (see Chapter 1, "Multipoint Conferencing Scenarios" on page 1-3).
- Using Office Communicator native conferencing capabilities; using the new conference icon (no need to add the MGC Entry Queue to the Contacts list).

#### **Windows Messenger**

#### To add Audio and Video to a Windows Messenger session:

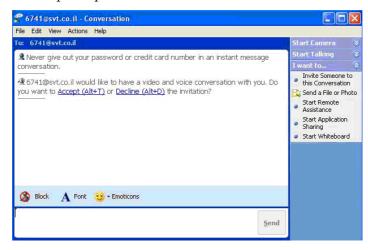
**1** Start a Windows Messenger session by inviting the required buddies from the list.



**2** Add a new buddy to the conference, selecting the Ad-hoc Entry Queue from the buddy list.



A new conference is created and is automatically assigned an identification number (for example, 6741). An invitation to join the video conference is sent from the MCU (conference 6741) to all the IM session participants.

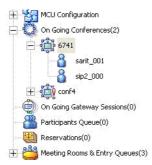


**3** Participants must accept the invitation to join the video conference.

**4** Once the invitation is accepted and the participant joins the conference, the video is displayed in Windows Messenger window according to the selected conference layout.



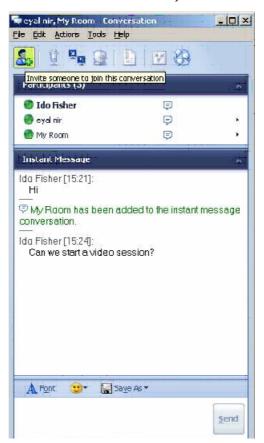
The ongoing video conference is also added to the list of On Going Conferences in the MGC Manager application.



#### **Office Communicator**

#### To add Audio and Video to an Office Communicator session:

- 1 Start an Office Communicator session by inviting the required buddies from the list.
- **2** Add the Ad-hoc Entry Queue from the buddy list:
  - **a** Click the **Invite someone to join this conversation** icon.



**b** In the *Invite someone to join this conversation* window, select the name of the ad-hoc Entry Queue.

ind Enter name or	number	1
ontacts.		
🕑 Add Hoc EQ	Online	-
atara EQU addhocEQ@i	p.co.i	
🖉 eyal	Dnine	
MR01	Online	
) MROZ	Online	
MR03	Online	
MR04	Online	
MR05	Online	
MR06	Online	
MR07	Online	
MR08	Online	
D MR09	Online	
D MR10	Online	
🕑 MR11	Online	
D MR12	Online	
D MR13	Online	
MR14	Online	

**3** A new conference is created and is automatically assigned an identification number (for example, 6741). An invitation to join the video conference is sent from the MCU (conference 6741) to all the IM session participants.



**4** Participants must accept the invitation to join the video conference.

**5** Once the invitation is accepted and the participant joins the conference, the video is displayed in the Windows Messenger window according to the selected conference layout.



The ongoing video conference is also added to the list of On Going Conferences in the MGC Manager application.

## Office Communicator New Multipoint Conferencing Scenarios Based on SIP-CX Protocol

This section describes Office Communicator New Multipoint Conferencing Scenarios Based on Microsoft SIP-CX conference control capabilities. SIP-CX protocol enables Office Communicator users complete conference control from within the Office Communicator client; monitor their ongoing conference, invite others to join their conference and schedule a conference. It also enables users to select the conferencing device with which to join the conference; Office Communicator, phone, video conferencing system or a mobile 3G videophone.

## Starting a New Conference Directly from within Office Communicator

To start a new audio or video conference:

In the Office Communicator, click Actions ->More ->Start a New Conference.



The *Join the Conference* dialog box opens, with the indication *Connecting to the conference*. Once the connection to the conference is established, you are requested to select where the conferencing service will call you back to connect you to the conference.

**2** Select the callback number / address to be used by the MGC.

Join the Confe	rence 🔊
	r where the conferencing service can call you for this conference If you want to dial in directly, click I Will Call In.
Call me back at:	972-9-7663851 Go Stop
	972-9-7663851
Not in a call	Computer Other Phone Number
	Other Address
	Mil Call In Answer Close Help

Select one of the following options:

- A predefined E.164 number
- Computer to specify the Office Communicator client
- Other Address to specify any SIP URI.
- **a** If you select Other Address, the *New Address* dialog box opens.

Join the	Conference	×
New Ad	dress 🛛 🔀	I for this conference
	e device address below (for example, e@microsoft.com).	In.
Address	sip:david1@lcs2005.co.it	
	OK Cancel Help	
	I Will Call In Answer Close	Help

**b** Enter the SIP URI in the format: sip:user name@domain.

To specify a non-SIP callback address the Office Communicator user enters the "user=xxx" attribute.

For example, an H.323 callback address is specified with "123" as the target address: 123@lcs2005.co.il;user=h323.

This would result in the MGC initiating an H.323 dial out to alias=123 via its configured gatekeeper.

**3** The Office Communicator is expanded to show the video window and the conference controls, and your self image is displayed in the video window.

In addition, the conference connection parameters are displayed in the Conversation window.

### An Office Communicator User Invites another Office Communicator Contact to the Conference

Office Communicator users running a conference can invite other Office Communicator users to their conference.

#### To Invite another Office Communicator user to your conference:

1 In Office Communicator, click Actions and then click Invite Someone to Join This Conversation.

🗟 Conv	ersation		
File Edit	Actions	Tools Help	
	Invite	Someone to Join This Conversation	
	Displa	ay Audio Controls	
Partic	Π	Sharing	×
C Ar		a Video Conversation the Conference	
	· · · ·	a File	
Insta		Microsoft Office Live Meeting	~
🖧 Joir	i Send	E-Mail	
Confe	ence Ad	dress: sip:t1@lcs2005.co.il	
Partici	pant pas	scode : 456	
Toll Fr	ee :		
Toll :			
		onference if you get disconnected, cli	ck <u>Join</u>
( <u>Alt+J</u> )			
_å₩a	ming: Thi	s conference is being recorded.	
ి You	have joi	ned the conference.	

**2** Select the contact to be invited to your conference from the contacts list, or enter the contact name to find.

Invite Someone	to Join This Conversation	×
Select a cick OK.	ontact, or type a name to find, an	d then
Find Enter	name or number	
Contacts		
🕘 asher	Online	<u>^</u>
🔵 conf2	Online	
Ido Fisher	Away	
Iab01	Away	
Iab02	Away	=
🕘 maayan	Away	
🕘 orip	Away	
e) sip4	Away	
🕘 y2	Away	
🥏 atara2	Offline	
🧼 avishay	Offline	
🕘 chuck	Offline	
🕘 conf6	Offline	
🥏 dan	Offline	
💛 EQ01	Offline	
🧼 eyal nir	Offline	
🥏 guy	Offline	
🥏 IdoPVX	Offline	~
	OK Cano	el

An invitation is sent from the inviter to the invitee's Office Communicator UA with the conference details which are displayed in the invitee's Office Communicator client.

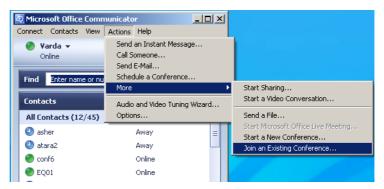
**3** The invitee must accept the invitation to become a conference watcher/ controller and may select dialing in or call back as described for "Starting a New Conference Directly from within Office Communicator" on page 1-22.

#### An Office Communicator User Joins an Existing Conference

An Office Communicator user can select to join someone else's conference by specifying the conference details (name and password).

#### To Join an existing conference:

1 In Office Communicator, click **Actions**, click **More**, and then click **Join an Existing Conference**.



2 In the *Enter Conference Information* dialog box, enter the conference name (in the format name@domain), conference entry password (participant passcode) and chairperson password (Leader passcode) (optional).

Enter Conference Information	×
To join a conference you must first provide the conference information. If you do not know this information, contact the organizer.	
Enter the conference address:	
mr02@ip.co.il	
Enter the participant passcode:	
5678	
If you are the leader, enter the leader passcode:	
OK Cancel	

**3** The user gets an invitation in his *Conversation* window with the conference details.



The user can join the conference with their preferred media either by dialing in using the displayed conference SIP URI, or select/specify a callback number/address in the displayed *Join the Conference* dialog.

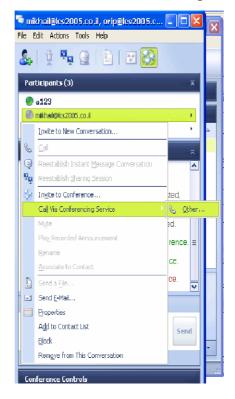
Join the Confe	rence	K		
Select the number where the conferencing service can call you for this conference and then click Go. If you want to dial in directly, click I Will Call In.				
Call me back at:	972-9-7663851 🔽 Go Stop			
Not in a call				
IV	Vill Call In Answer Close Help			

#### An Office Communicator User Dials out to another Office Communicator User

Office Communicator users can specify and add a new participant to their ongoing conference. The invitee MUST be on the user's Office Communicator contact list but can be offline or can be away and the connection can be done to the user's media device such as cellular phone, laptop, telephone, etc.

#### To dial out to another Office Communicator user:

- **1** Start a new conference.
- **2** Add a participant that is away or offline to the conference.
- **3** In the Office Communicator Contacts list, right-click the contact to call, click **Call via Conferencing Service**, and then click **Other**.



The New Phone Number dialog box opens.

New Phone Number	X
Enter the phone number below. For international numb include all necessary country and region codes.	ers.
Phone number:	
OK Cancel Het	, _

The MGC system supports the use of a dial plan for parsing and interpreting a received number as an H.323 alias, SIP URI or ISDN number to be used accordingly by the MGC system for initiating a callback to that device.

The E.164 number (no SIP URI) is converted into a SIP URI by Office Communicator, inserted into the Refer-To field and sent in the REFER transaction to the MGC system.

For example: the user enters "1234567". The Refer-To field sent by Office Communicator to the MGC will have: "sip:1234567@domain;user=phone".

Now the MGC unit can use the dial plan, as defined in system.cfg, to parse and interpret the "1234567" string and initiate a corresponding H.323, SIP, ISDN or PSTN dial out.

The REFER request sent to MGC contains a "ms-associated-sip-uri" field that includes the invitee's URI. The MGC system can use this information to identify the name of the new participants in notifications it sends to Office Communicator conference watchers.

### Adding Audio/Video to an Office Communicator Multiparty IM Session

In this scenario the a multiparty IM session is escalated into an audio / video conference on a Polycom MGC unit from the Office Communicator toolbar.

#### To escalate an Office Communicator multiparty IM Session to an audio/ video multipoint conference:

1 While a multiparty IM session is running in Office Communicator, on the toolbar click the **Conference** button.



E.			R)	
J	loin the Confe	erence	N	
-	Select the numbe and then click Go	er where the conference. If you want to dial in	ing service can cal you for dractly, click I Will Cal In.	this confere
	Call me back at:	Computer	🦉 🙆 🙎	top
et	Not in a call			-
n				
sk - Ye				
		Wil Call In Ans	wer dose	Нер

The Join the Conference dialog box opens in the Conversation window.

- 2 The IM session organizer can select / specify a callback number / address to be used by the system, or selects **Computer** to use the audio/video device used by Office Communicator itself. The IM session organizer can select any other SIP, ISDN, PSTN, H.323 device to be called back by the MGC.
- **3** Click the **Go** button.

A SIP REFER request is sent to the conferencing server (MGC) with the user's callback address.

While being "referred" and until the dial out from the MGC to the participants happen, the "Calling..." status indication is displayed in the IM session organizer Office Communicator client.

**4** All other IM buddies get an invitation in their Office Communicator IM pane, with PSTN dial-in details, and a hyper link to the conference.

Each invitee can now select between dialing manually into the conference or having the conferencing server dial back to the selected conferencing device. Users are able to select any device for their media participation in the conference including their PSTN phone, ISDN video endpoint, a SIP UA (that can be their OC client) or an H.323 video device.

- 🌒 atara2 🛩 Online. Find Enter name or number 🗣 y1 øip.co.il, atara - Conversation File Edit Actions Tools Help 🗞 🖞 🎭 🎯 🕒 🖾 🎊 In a confer... In a confer... Participants (3) atora2 Ģ Ð Ċ yt@ip.ca.il . P 🖨 atara Instant Message VI IS SUGULIU IM 3 parties atara has been added to the instant message iew mare information. conversation. A strain of the sentence. Do you want to join the conference. Do you want to join (Att-J)? If you do no accept you will not join the eadio portion of the conference, but you can still participate in the instant message portion of the conterence. Actions + Details Ι V
- **5** Click the link to select the callback option.

The *Join Conference* dialog box is displayed in the remaining participants Office Communicator client.

6 Select/specify a callback number / address to be used by the system, or selects **Computer** to use the endpoint connected to the user's Office Communicator client.

## Scheduling a Meeting—Office Communicator–Outlook Integration

Office Communicator users can schedule conferences using Outlook from their Office Communicator client.

#### To schedule a conference:

1 In Office Communicator, on the Actions menu, click Schedule a Conference.

🧔 Microsoft Office Comn	nunicator 📃	
Connect Contacts View	Actions Help	
varda@ip.co.il - Status unknown	Send an Instant Message Call Someone Send E-Mail	
Find Enter name or nu		
Contacts All Contacts (2/13)	More Audio and Video Tuning Wizar Options	• 
		М
	Away	ol
	Away Offline	E
e avishay	Offline	≡ s
onf2		lu
e dan	Offline Offline	hd
EQ01		re.
🥏 eyal nir	Offline	
e guy	Offline	Ē
Ido Fisher	Offline	i di
Iab01 — Away lab01@ip.co.il	¥ ALL	ve sta
। 🖞 Call 🕶	Details Actions	

The *Outlook New Meeting Request* window opens, with the meeting organizer's conference information taken from the conference parameters configured in the Office Communicator Options – Accounts. For detailed description, see "Defining the Conferencing Properties in your Office Communicator" on page A-17.

🏛 Untitled - Meeting	
Ele Edit View Insert Format Tools Actions Help	
🗄 🖙 Send   🛃 🕼   🛄 🌡 /   🕂 Recurrence 🕎 Cancel Invitation   📍 🌲   📉 🔩   🕲 🥊	
Arial - 10 - A B I U ≡ Ξ Ξ Ξ Ξ Ξ Delete T F	
Appointment Scheduling	
Invitations have not been sent for this meeting.	
To Jacobe, Mike; Jagr. Jaromir; Jakes, Juli	
Subject: Sales	
Location: Label: None	•
Start time:         Wed 10/12/2005         I 1:00 PM         I All day event           End time:         Wed 10/12/2005         I 1:30 PM         I	
Reminder: 15 minutes Show time as: Busy	
Meeting Workspace This is an online meeting using: Microsoft NetMeeting	
You have been invited to a conference. At the time of conference call, click the following link to attend:	
Join Conference	
If you cannot click the conference link above, or it does not work, try copying and pasting the link below into your Internet browser.	
conf:sip:1007@jp.co.il?conversation-id=49036017-F1EF-47F4-8406-9A407CEA450A;provider=ip.co.il;account=1007;participant=5678;toll-free= 1-800-33333333;toll=617-1111111	
If you wish to dial in directly, use the following numbers to call the service, and then enter the participant code:	
Toll free number:         1-800-3333333           Toll international:         617-11111111           Participant code:         5678	
Note: If you do not have Microsoft Office Communicator, you can join this conference only by dialing in using the numbers above.	-
Contacts Categories Private	e 🗆

The following parameters are displayed:

- The conference SIP URI, for example, 1007@ip.co.il
- Conference toll free dial in number, for example, 1-800-3333333
- Conference toll number, for example, 617-111111111
- Conference entry Password, for example, 5678
- **2** You can add to the invitation conference participants, subject, location, date and time as with any regular Outlook invitation.

At the conference due time the Outlook invitation reminder opens on all invitees' PCs.

Invitees can select between using the displayed conference information for dialing in and joining the conference or click the **Join Conference** link which will activate your Office Communicator application and use the callback option.

# **Starting a Data Sharing Session**

During an ongoing point-to-point or multipoint audio and video meeting you can add data sharing; application sharing and whiteboard. The data sharing invitation is sent to all meeting participants.

To start a data sharing session during an ongoing conference:

1 In the *Conversation* window, click the **Data Sharing** button.

🗣 eyal nir - Conversation		
File Edit Actions Tools Help		
	3	
Participants (2)		~
🗢 Varda	Ţ,	₽°.
📀 eyal nir	Ģ	₽
Instant Message		~
eyal nir [11:47 AM]: Can you send me the latest version of Varda [11:47 AM]: Later today Varda [11:48 AM]: I still have to finish a few small correct eyal nir [11:50 AM]: OK. I am trying to do sharing with you We eyal nir is inviting you to a data shar to Accept (Alt+C) or Decline (Alt+D) the We are accepted the request from sharing session.	ctions 1. please ac ing session. invitation? n eyal nir to	cept . Do you want
A Font 🙂 - 🔚 Save As -		
		Send
Last message received on 12/5/2005 at 11:50	AM.	
Sharing Controls		
🗣 Application Sharing 🛛 📮 Whiteboard		

**2** An invitation is sent to all the meeting participants who must accept it in order to participate in the sharing session.

Once the invitation is accepted by the meeting participants, the *Sharing Controls* at the bottom of the *Conversation* window are enabled.

**3** Click the **Application Sharing** button to start an application sharing session.

🖧   🖞 🖳 🎯   🖺   🗵	3 🚱
Participants (2)	~
<ul> <li>Varda</li> <li>eyal nir</li> </ul>	
Instant Message	~
eyal nir [11:47 AM]: Can you send me the latest vers Varda [11:47 AM]: Later today Varda [11:48 AM]: I still have to finish a few small co eyal nir [11:50 AM]: OK. I am trying to do sharing with eyal nir is inviting you to a data a to Accept (Alt+C) or Decline (Alt+D e vou have accepted the request sharing session.	prrections I you, please accept sharing session. Do you want ) the invitation? thom eyal nir to have a data
🔺 Font 🙂 🛛 🔚 Save As 🕶	
	Send
Last message received on 12/5/2005 at 1	1:50 AM.
Sharing Controls	
Application Sharing	1

The Sharing dialog box opens.

Share Programs	
Select an item to share with other people then click Share.	in the meeting, and
🔊 Adobe FrameMaker - [D:\P	Share
🚜 MSN Messenger	
🛞 MGC Manager (VERSION 7	Unshare
Comments Summarize 5-12-	
🔄 Microsoft Office Communica	Unshare All
777777 2222777 22227777777777777777777	
Share in true color	
Control	
Control	r shared programs or
Control	r shared programs or
Control	r shared programs or
Control Click to allow other people to control you desktop.	r shared programs or
Control Click to allow other people to control you desktop.	
Control Click to allow other people to control you desktop.	ntrol
Control Click to allow other people to control you desktop. Allow Control Automatically accept requests for co	ntrol
Control Click to allow other people to control you desktop. Allow Control Automatically accept requests for co	ntrol

**4** Click the application you want to share, and click the **Share** button. The Application opens on the computers of all meeting participants.

# Conference Control via Office Communicator SIP-CX Protocol

Once the conference has started, the meeting organizer can perform various operations using the Office Communicator controls.



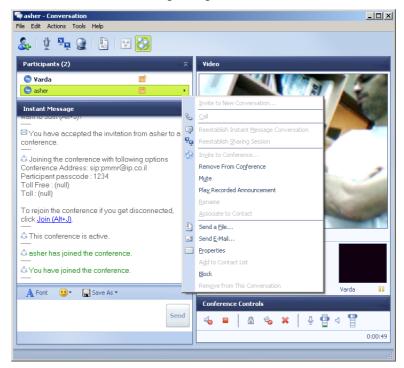
Controls available to the meeting organizer:

- Self Mute/Unmute
- Leave conference
- Lock conference
- Mute/Unmute all but me
- Terminate the conference
- Change self broadcasting and listening volumes

Participant that is not the meeting organizer can mute or unmute the endpoint and change the self broadcasting and listening volumes.

In addition, using the participant menu, the meeting organizer can:

- Mute/Unmute a participant
- Remove participant from the conference
- Play recorded announcement
- Send a file or e-mail to the participant



# Appendix A: Multipoint Conferencing Settings

This appendix describes the configuration procedures required to enable multipoint conferencing with Office Communicator and Windows Messenger clients. Several procedures are required by Office Communicator users only, to enable direct conferencing, monitoring and control capabilities and conference scheduling from within Office Communicator.

- Enabling the direct conferencing from within Office Communicator
- Enabling video calls with Office Communicator
- Enabling data sharing with Office Communicator
- Optional. Limiting the bandwidth allocated to the audio/video connection to a conference via Office Communicator
- Modifying Windows Hosts list to include the LCS
- Signing-in Office Communicator and Windows Messenger clients with the Live Communications Server
- Defining the conference properties in the participant's Office Communicator client

To enable conference access via Entry Queue (even if using the SIP-CX component) and to add legacy endpoints to the buddy list, the following procedures must be performed from the Windows Messenger or Office Communicator client:

- Adding a Meeting Room or Entry Queue to the Buddy/Contacts list
- Adding endpoints to Office Communicator and Windows Messenger Buddy/Contacts list

# Enabling Office Communicator Conferencing Features

This procedure is required only when using Office Communicator conferencing features to start, join or control a multipoint audio and video conference directly from within Office Communicator.

This section describes enabling the following features:

- Enabling direct conferencing from within Office Communicator
- Enabling video calls with Office Communicator
- Enabling data sharing with Office Communicator
- Optional. Limiting the bandwidth allocated to the audio/video connection to a conference via Office Communicator

## Enabling Direct Conferencing from within Office Communicator in Windows

This procedure consists of two stages:

- Copying the appropriate Communicator file to the required Windows directory
- Enabling the conferencing feature in Windows.

#### To enable conferencing from within Office Communicator:

- 1 Close and exit your Office Communicator client.
- Copy the file communicator.adm received with Office Communicator installation from the application folder to: C:\WINDOWS\inf directory (note that "inf" is a hidden directory).
- 3 Click Start -> Run
- **4** In the *Run* dialog box, enter **gpedit.msc** (Group Policy edit). The *Group Policy* window opens.
- **5** In the *Local Computer Policy* tree, expand the **Computer Configuration** tree.

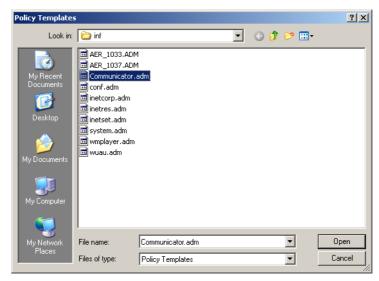
**6** Right-click the **Administrative Templates**, and then select **Add/ Remove Templates**.

🚡 Group Policy			×
File Action View Help			
Computer Policy	🚞 Administrative Templates	-	
Software Settings	Select an item to view its description.	Setting	
Administrative Templates     Add/Remove Templates		Network	
All Tasks		Windows Components	
		Microsoft Office Communicator Policy Settings	
Export List			
Help			
			_
	Extended Standard	•	<u> </u>
Manage administrative templates			

7 In the *Add/Remove Templates* dialog box, click the **Add** button.

Add/Remove Templates Current Policy Templates: Name	Size	? >	<
conf     inetres	39KB 1397KB	8/4/2004 5:00 AM 8/4/2004 5:00 AM	
a system a wmplayer	1703KB 65KB	8/4/2004 5:00 AM 9/22/2004 6:46	
a wuau	42KB	5/26/2005 4:16	
Add Remove		Close	

8 In the *Policy Templates* dialog box, select **communicator.adm** and click **Open**.

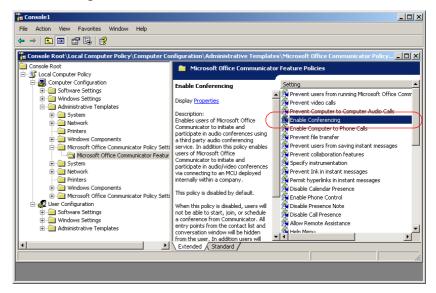


The selected file is added to the *Add/Remove Templates* dialog box.

- **9** In the *Add/Remove Templates* dialog box, click **Close**.
- In the *Group Policy* window, in the *Local Computer Policy* tree, expand the Administrative Templates >Microsoft Office Communicator Policy Setting and click the Microsoft Office Communicator Feature Policies folder.

The list of features is displayed in the right pane.

**11** In the *Feature Policies - Settings* list, double-click **Enable Conferencing**.



The Enable Conferencing Properties dialog box opens.

**12** Click **Enabled**, and **OK**.

Enable Conferencing Properties	? ×
Setting Explain	
🛱 Enable Conferencing	
Not Configured     Enabled     Disabled	
Previous Setting Next Setting	
OK Cancel Ap	ply

The system returns to the Group Policy window.



At this point you can either close the Group Policy window, or you can modify the bandwidth allocated to video conferencing (optional and not required if using Office Communicator default allocation).

## **Enabling video calls with Office Communicator**

- **13** In the *Group Policy* window, in the features list displayed on the right pane, double-click the **Prevent video calls** option.
- **14** In the *Prevent video calls Properties* dialog box, click the **Disabled** button.

Prevent video calls Properties	? ×
Setting Explain	
🛱 Prevent video calls	
C Not Configured	
Oisabled	
Supported on: At least Microsoft Windows XP	
Previous Setting Next Setting	
OK Cancel A	pply

15 Click OK.

The system returns to the Group Policy window.

## **Enabling data sharing with Office Communicator**

- **16** In the *Group Policy* window, in the features list displayed in the right pane, double-click the **Prevent collaboration features** option.
- **17** In the *Prevent collaboration features properties* dialog box, click the **Disabled** button.

Prevent collaboration features Properties	<u>?</u> ×
Setting Explain	
Prevent collaboration features	
C Not Configured	
O Enabled	
O Disabled	
· ·	- 1
Previous Setting Next Setting	
OK Cancel App	oly

#### 18 Click OK.

The system returns to the Group Policy window.

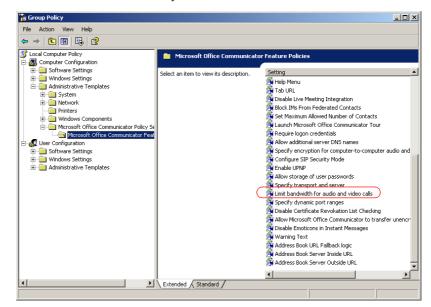
- **19** If you do not need to modify the bandwidth allocation, close the *Group Policy* window.
- **20** Click **No** when prompted if you wish to save the changes.

## **Bandwidth Allocation Modification**

This procedure is optional and is required only if you need to change the default bandwidth allocated by Office Communicator (default allocation is 1 MB per second) for audio and video calls.

# To modify the Bandwidth allocated to Office Communicator audio and video calls:

1 In the *Group Policy* window, double-click the **Limit bandwidth for audio and video calls** entry.



- **2** In the *Limit bandwidth for audio and video calls Properties* dialog box, click **Enabled**.
- **3** In the *Maximum bandwidth* box, enter the maximum bandwidth that can be allocated to a video call.

Limit bandwidth for audio and video calls Properties	? ×
Setting Explain	
😭 Limit bandwidth for audio and video calls	
C Not Configured C Enabled C Disabled	
Maximum bandwidth 384000	
Desting Califier 1 New Califier 1	
Previous Setting Next Setting	
OK Cancel /	Apply

For example, to limit the bandwidth to 384 Kbps, enter 384000.

- 4 Click OK.
- **5** Close the *Group Policy* window without saving (click **NO** when prompted).

# Modifying Windows Hosts List to Include the LCS

This procedure is required to enable data transfer between your computer and the LCS.

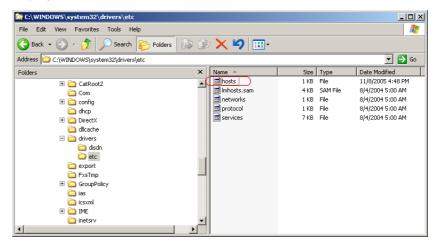
### To define the LCS as a local host:

1 Using Windows Explorer, browse to the following folder:

```
C:\WINDOWS\system32\drivers\etc
```

or in the *Address* box, enter %windir%\system32\drivers\etc

**2** Double-click the **Hosts** file and select the Notepad application to display its contents.



- **3** Under Local Hosts add the following lines:
  - IP address of the LCS server and pool domain name
  - IP address and domain name of the LCS server

For example: 172.22.187.159 pool01.ip.co.il 172.22.187.159 ip.co.il

📕 hosts - Notepad		_ 🗆 ×
File Edit Format View Help		
# Copyright (c) 1993-1999 Microsoft Corp.		*
# This is a sample HOSTS file used by Mic	rosoft TCP/IP for Windows.	
# This file contains the mappings of IP a # entry should be kept on an individual 1 # be placed in the first column followed # The IP address and the host name should # space.	ddresses to host names. Each ine. The IP address should by the corresponding host name. be separated by at least one	
<pre># Additionally, comments (such as these) # lines or following the machine name den # For example:</pre>	may be inserted on individual oted by a '#' symbol.	
# # 102.54.94.97 rhino.acme.com # 38.25.63.10 x.acme.com	# source server # x client host	
127.0.0.1 localhost		
172.22.187.159 pool01.ip.co.il 172.22.187.159 ip.co.il		
		-
		► //

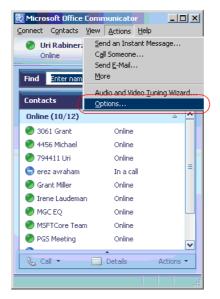
**4** Save the file.

# Signing-in Windows Messenger and Office Communicator Clients to the Live Communications Server

To sign in Windows Messenger and Office Communicator users to the LCS, the IP address of the LCS server must be configured in the Windows Messenger and the Office Communicator.

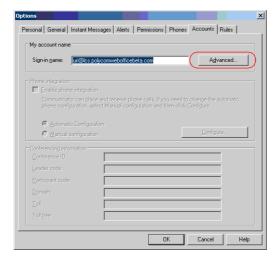
# **Office Communicator Configuration**

- **1** Open Office Communicator.
- **2** On the *Actions* menu, click **Options**.



The Options dialog box opens.

- **3** Click the **Accounts** tab.
- **4** Click the **Advanced** button.



- **5** Enter the sign-in name as defined in the LCS.
- **6** In the *Advanced Connection Settings* dialog box, click **Configure settings**.

Advanced Connection Settings	X
Select which method should be used to configure your connection to a communications service:	
O Automatic configuration	
Configure settings	
Server name or IP address: 172.16.74.98	
Connect using:	
⊙ <u>I</u> CP	
⊙ t <u>l</u> s	
OK Cancel Help	

- 7 In *Server name or IP address* field, enter the IP address of the LCS server.
- **8** In the *Connect using* box, select **TCP** as the protocol to use for the connection.
- 9 Click OK.
- **10** Click **OK** to exit the *Options* dialog box.

## **Windows Messenger Configuration**

#### To configure the connection parameters:

- **1** Open Windows Messenger.
- **2** On the *Tools* menu, click **Options**.
- **3** Click the **Accounts** tab.
- 4 In the *Options Accounts* dialog box, in the *SIP Communications Service Account* section, make sure that the **My contacts include users of a SIP Communication Service** check box is selected.

Options		×
Personal Phone Preferences Privacy Accounts	Connection	
.NET Passport Account	Not Signed Ir sssenger Service	) —
SIP Communications Service Account	Signed In	_
→ My contacts include users of a SIP Co	mmunications Servi	ce
Sign-in name: uri@lcs.polycomwebofficeb	beta. Advanced	
Exchange Account	Not Signed In le Instant Messaging Advanced	
OKC	ancel He	lp

**5** Click the **Advanced** button.

**6** In the *SIP Communications Service Connection Configuration* dialog box, click **Configure settings**.

SIP Communications Service Connection Configuration	×
Select which method should be used to configure your connection to communications service:	a
C Automatic configuration	
Configure settings	
Server name or IP address: 172.16.74.98	
Connect using:	
O T <u>L</u> S	
○ <u>U</u> DP	
OK Cancel Help	

- 7 In *Server name or IP address* box, enter the IP address of the LCS server (Server B in the configuration).
- **8** In the *Connect using* section, select **TCP** as the protocol to use for the connection.
- **9** Click **OK** to complete the configuration.

Windows Messenger can now be used to communicate between clients.

# Defining the Conferencing Properties in your Office Communicator

The properties defined here are based on the Meeting Room properties created by the system administrator in the MGC Manager. These parameters enable you to automatically start and join your conference from Office Communicator.

Before proceeding, make sure that you have set the following parameters:

- Conference name or Numeric ID
- Leader (chairperson) password
- Participant code (conference entry password)
- Domain

Optional parameters (if the conferencing server – MCU is connected to PSTN/ISDN lines):

- Toll dial-in number (assigned to the conference)
- Toll free number (assigned to the conference)

#### To define your conference properties:

- **1** In Office Communicator, in the *Actions* menu, click **Options**.
- **2** In the *Options* dialog box, click the **Accounts** tab.

Sign-in name: varda@		Advanced
		Advanced
hone integration		
Enable phone integra	ation	
	lace and receive phone calls. If select Manual configuration an	f you need to change the automatic ad then plick Configure
Automatic Config	n ration	
Automatic Config Configuration Configuration		Configure
<ul> <li>Automatic Config</li> <li>Manual configuration</li> </ul>		Configure
C Manual configura		Configure
C Manual configura		Configure
C Manual configura onferencing information Conference ID:	ation 1007	Configure
C Manual configuration onferencing information Conference ID: Leader code:	1007 1234	Configure
C Manual configura onferencing information Conference ID: Leader code: Participant code:	1007 1234 5678	Configure
C Manual configuration onferencing information Conference ID: Leader code:	1007 1234	Configure
C Manual configuration onferencing information Conference ID: Leader code: Participant code:	1007 1234 5678	Configure

# **3** In the *Conferencing Information* section, enter the following information:

Field	Description
Conference ID	Enter the name assigned to your Meeting Room in the MGC environment. If an Entry Queue is used for conference access, use numerals.
Leader code	Enter the password defined for your conference in the MGC environment that identifies you as conference chairperson and enables you to control it while it is running.
Participant code	Enter the entry password defined for your conference in the MGC environment. This password enables you to start and join your conference.
Domain	Enter your domain name. This is required for callback.
Toll	Optional. Enter the dial-in number (PSTN or ISDN) assigned to the Meeting Room in MGC environment. The PSTN / ISDN dial-in numbers can be either the Meeting Room dial-in numbers or an Entry Queue number. Using a single-dial Entry Queue and specifying the target conference ID via DTMF enables you to use a limited number of PSTN dial-in numbers, which are precious resources and it might not be feasible to allocate a separate individual number for each Meeting Room.
Toll free	Optional. Enter the toll free dial-in number (PSTN or ISDN) assigned to the Meeting Room in MGC environment. Toll free numbers are usually a 1-800 number assigned to the Entry Queue and not an individual conference number. Therefore, conference ID / name specified should consist of numerals and not characters.

 Table A-1
 Conference Information Parameters

4 Click OK.

# Adding a Meeting Room or an Entry Queue to the Buddy List

To enable the multipoint conferencing scenarios from Windows Messenger or Office Communicator (without SIP-CX component), the Meeting Rooms and Entry Queues must be added to their buddy lists. This procedure is performed only after the Meeting Room or Entry queue is defined in the MGC Manager and LCS 2005. For more details, see Chapter 2, "Procedure 8 – Defining Additional Conferencing Components in the MGC Environment" on page 2-27.

### **Office Communicator**

### To add the Meeting Room or Entry Queue as a Contact in the Office Communicator buddy list:

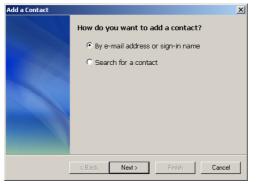
Once the Meeting Room is defined and registered with the LCS, it can be added to the buddy list of all Office Communicator users in the organization.

1 On the *Contacts* menu, click **Add a Contact**.



The Add a Contact wizard opens.

**2** Select the option to add the contact by e-mail address, and click **Next**.



**3** Enter the Meeting Room/Entry Queue e-mail address, or use the Search option, and then click **Next**.

Add a Contact	×
Please type the e-mail address or sign-in name o want to find	f the person you
1	
Example: someone@microsoft.com	
Kext Next > Finish	Cancel
C DOOR INDALY	

A confirmation message is displayed.

4 Click Finish.

The name of the Meeting Room or Entry Queue appears in the Office Communicator Contact list.

### **Windows Messenger**

# To add the Meeting Room or Entry Queue as a Contact in the Windows Messenger buddy list:

Once the Meeting Room is defined, it can be added to the buddy list of all Windows Messenger users in the organization.

- 1 On the *Tools* menu, click **Add a Contact**. The *Add a Contact* wizard opens.
- 2 Select the option to add a contact by e-mail address, or use the Search option and then click **Next**.

Add a Contact		X
	Windows* Messenger	et
How do you want to add a contact?		
By e-mail address or sign-in name		
○ <u>S</u> earch for a contact		
< Back Next>	Finish Cancel	

**3** Make sure that the selected service is SIP and enter the Meeting Room/Entry Queue SIP address.



The name of the Meeting Room or Entry Queue appears in the Windows Messenger Buddy list.



## Adding Endpoints to Office Communicator and Windows Messenger Buddy Lists

Once the endpoint is registered with LCS, you can add it to the buddy list of Windows Messenger and Office Communicator. For a detailed description of endpoint configuration and the creation of its user account in the LCS, see Chapter 2, "Endpoint Settings" on page 2-36.

### **Office Communicator**

To add the endpoint as a Contact in the Office Communicator buddy list:

**1** On the *Contacts* menu, click **Add a Contact**.

The Add a Contact wizard opens.

- 2 Select the option to add the contact by e-mail address, and click Next.
- 3 Enter the endpoint's e-mail address, or use the Search option, and then click Next.A confirmation message is displayed.
- Click Finish to complete this procedure and exit the wizard, or click Next to add additional endpoints.
   The name of the endpoint appears in the Office Communicator Buddy list.

## **Windows Messenger**

#### To add the endpoint as a Contact in Windows the Messenger buddy list:

- 1 On the *Tools* menu, click **Add a Contact**. The *Add a contact* wizard opens.
- **2** Select the option to add a contact by E-mail address, or use the Search option and then click **Next**.
- **3** Make sure that the selected service is SIP and enter the endpoint's SIP address.

The name of the endpoint appears in the Windows Messenger Buddy list.